WHAT IS CLAIMED IS:

1. A medical device, comprising a substrate with a plasma polymerized functionality bonded to at least a section thereof.

2. The medical device of claim 1 wherein the plasma polymerized functionality is selected from the group consisting of carboxylate, amine, and sulfate.

3. The medical device of claim 2 wherein the plasma polymerized functionality is acrylate.

4. The medical device of claim 3 wherein the plasma polymerized functionality is acylic acid.

5. The medical device of claim 1 wherein the plasma polymerized functionality comprises a crosslinked film covalently bonded to a surface of the substrate.

6. The medical device of claim 1 wherein the plasma polymerized functionality comprises a crosslinked surface film on a surface of the substrate and a polymer bulk film beneath the surface of the substrate.

7. The medical device of claim 1 including an agent bonded to the plasma polymerized functionality.

8. The medical device of claim 7 wherein the agent is selected from the group consisting of an adhesive, and a bioactive agent.

9. The medical device of claim 1 wherein the substrate is formed at least in part of a polymeric material selected from the group consisting of a fluoropolymer, polytetrafluoroethylene, expanded polytetrafluoroethylene, high density polyethylene, polyimide, and polyetherether ketone.

10. The medical device of claim 1 wherein the plasma polymerized functionality comprises a film having a thickness of about 10 nm to about 150 nm.

11. The medical device of claim 1 wherein the substrate is formed at least in part of a polymeric material having a node and fibril microstructure.

12. The medical device of claim 1 wherein the medical device is a catheter having a first component formed at least in part of the substrate, the first component being selected from the group consisting of a balloon and a shaft.

13. The medical device of claim 12 wherein at least a portion of the section of the first component having the plasma polymerized functionality thereon is fusion bonded to a second component.

14. The medical device of claim 1 wherein the medical device is selected from the group consisting of a catheter, a vascular graft, and a stent cover.

15. A catheter, comprising

a) a first component formed at least in part of a substrate having a plasma polymerized functionality covalently bonded to at least a section of the substrate;

b) a second component bonded to the first component.

16. The catheter of claim 15 wherein the first component is a balloon and the second component is a shaft.

17. The catheter of claim 16 wherein the balloon substrate comprises expanded polytetrafluoroethylene.

18. The catheter of claim 17 wherein the balloon further comprises an elastomeric material, and the plasma polymerized functionality is on a surface of the expanded polytetrafluoroethylene having the elastomeric material fusion bonded thereto.

19. The catheter of claim 15 wherein the first component is an elongated shaft, and the second component is a balloon.

20. The catheter of claim 19 wherein the shaft is formed at least in part of a polymeric material selected from the group consisting of high density polyethylene and a fluoropolymer, and the balloon is formed of at least in part of a polyamide.

21. The catheter of claim 15 wherein the first component is a first shaft section, and the second component is a second shaft section.

22. A medical device component comprising a substrate which is formed at least in part of a polymeric material having a node and fibril microstructure, and which has a plasma polymerized functionality covalently bonded to at least a section thereof.

23. A method of treating a surface of at least a section of a medical device, comprising exposing at least a section the medical device formed of a polymeric material having a node and fibril microstructure to a plasma to deposit a plasma polymerized functionality on the section of the medical device.

24. The method of claim 23 wherein the polymeric material of the section of the medical device is expanded polytetrafluoroethylene, and depositing the functionality on the section of the medical device comprises exposing the section to a plasma without decomposing the polymeric material of the section of the medical device.

25. The method of claim 23 wherein depositing the functionality on the section of the medical device comprises exposing the section to an acrylic acid plasma to form a carboxylate plasma polymerized film thereon.

26. The method of claim 25 including providing carbon dioxide in the acrylic acid plasma to limit a rate of decarboxylation from the section of the medical device.

27. The method of claim 23 including bonding an agent selected from the group consisting of a bioactive agent and an adhesive to at least a portion of the section of the medical device having the plasma polymerized functionality.

28. A method of making a medical device, comprising

a) exposing at least a section a first component formed at least in part of first polymeric material to a plasma to deposit a plasma polymerized functionality on the section of the first component of the device; and

b) bonding a second component formed of a second polymeric material different from the first polymeric material to the section of the first component having the plasma polymerized functionality thereon.

29. The method of claim 28 wherein the plasma is applied at a high pressure to chemically modify an inner surface of the first component.

30. The method of claim 28 wherein the plasma polymerized functionality is selected from the group consisting of carboxylate, amine, and sulfate, and the plasma polymerized functionality is a film formed with a thickness of about 10 nm to about 150 nm.

31. The method of claim 28 wherein the plasma polymerized functionality is selected from the group consisting of a carboxylate, an amine, and a sulfate, and (b) comprises fusion bonding the first component to the second component.

32. The method of claim 28 wherein the second polymeric material is incompatible with the first polymeric material, and (b) comprises fusion bonding the first component to the second component.